

### REMARKS

Claims 1, 6, 9, 28, and 29 have been amended. Claims 1-58 remain pending.

The Examiner has objected to the drawings under 37 CFR 1.83(a) because they fail to show the third lens group 102 of Figure 2, as described in the specification. Figure 2 has been corrected so as to add reference 102.

The Examiner rejected claims 1-4 under 35 U.S.C. §102(b) as being anticipated by Freedenberg et al. (U.S. patent 5,777,798). The Examiner has also rejected claims 10-13 and 25 under 35 U.S.C. §103(a) as being unpatentable over Freedenberg et al. in view of Horiuchi et al. (US 6,037,972).

The Examiner has also allowed claims 30-58 and indicated that claims 5-9, 14-24, and 26-29 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim. Towards this end, Claim 1 has also been amended to include a substantial portion of the limitations of original claim 9:

“wherein the lens system satisfies the following conditions (1) and (2):

$$0.9 < f/\# < 1.1 \quad (1)$$

$$0.90 < RI < 1.00 \quad (2)$$

where  $f/\#$  and RI are focus number and relative illumination respectively, both the  $f/\#$  and the RI being obtained across a field of view at an image plane at the camera side having a diameter greater than or equal to 26 mm, and both the  $f/\#$  and RI being obtained for the plurality of demagnification levels.”

Claim 1 has also been amended to include a third lens group configured to provide a plurality of demagnification levels as claimed in original claim 6.

As the Examiner notes in his reasons for allowance, the cited references fail to teach a lens system having wherein the lens system which satisfies the conditions “(1)  $0.9 < f/\# < 1.1$  and (2)  $0.90 < RI < 1.00$ , where  $f/\#$  and RI are focus number and relative illumination respectively, both the  $f/\#$  and the RI being obtained across a field of view at an image plane at the camera side having a diameter greater than or equal to 26 mm, and both the  $f/\#$  and RI being obtained for the

plurality of demagnification levels.” Accordingly, claim 1 is patentable over the cited references at least for this reason.

The Examiner’s rejections of the dependent claims are also respectfully traversed. However, to expedite prosecution, all of these claims will not be argued separately. Claims 2-29 each depend directly from independent claims 1 and, therefore, are respectfully submitted to be patentable over cited art for at least the reasons set forth above with respect to claims 1. Further, the dependent claims require additional elements that when considered in context of the claimed inventions further patentably distinguish the invention from the cited art.

Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,  
BEYER WEAVER & THOMAS, LLP

A handwritten signature in black ink, appearing to read 'Mary', with a long, sweeping horizontal line extending to the right.

Mary Olynick  
Reg. 42,963

P.O. Box 778  
Berkeley, CA 94704-0778  
(510) 843-6200